

WHAT IS CLAIMED IS:

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1. A reproduction protection method comprising:
attaching medium protection data, which are specific
to a data medium, to main data which represent an
original signal, and conveying said medium protection
data and main data by said data medium;

supplying said main data and medium protection data
via said data medium to a reproduction apparatus;

generating apparatus protection data which are
specific to said reproduction apparatus, within said
reproduction apparatus;

determining a protection level by combining the
medium protection data and the apparatus protection data;
and

controlling said reproduction apparatus to utilize
said main data to reproduce said original signal in
accordance with said protection level.

2. A reproduction apparatus providing reproduction
protection, for operating on main data which are conveyed
by a data medium and represent an original signal and on
medium protection data which are specific to said data
medium and are conveyed by said data medium, the
apparatus comprising:

means for generating apparatus protection data which

are specific to said reproduction apparatus;

means for defining a protection level based on said medium protection data and apparatus protection data in combination; and

5 means for executing reproduction of said original signal by utilizing said main data, including means for selectively restricting said reproduction in accordance with said protection level.

10 3. A reproduction apparatus providing reproduction protection, for operating on main data which are conveyed by a data medium and represent an original signal and on medium protection data which are specific to said data medium and are conveyed by said data medium, the
15 apparatus comprising:

means (10, 11) for detecting said medium protection data to obtain a medium protection signal expressing said medium protection level;

20 means (12) for generating an apparatus protection signal expressing an apparatus protection level which has been assigned to said reproduction apparatus;

25 means (13) responsive to said medium protection signal and apparatus protection signal for determining a final protection level in accordance with a combination of said medium protection level and apparatus protection

level, and generating a final protection level signal expressing said final protection level;

means (15) for utilizing said main data to execute reproduction of said original signal, including means
5 (14) responsive to said final protection level signal for selectively restricting said reproduction in accordance with said final protection level.

4. A reproduction apparatus according to claim 3,
10 wherein said main data are conveyed by said data medium after having been compressed and encoded, wherein said reproduction apparatus includes means (15a, 15b, 15c) for decoding and means for decompressing said main data, and wherein said means for selectively restricting
15 reproduction of the original signal comprise means for controlling at least one of said decoding means and said decompressing means in accordance with said final protection level.

20 5. A reproduction apparatus according to claim 3, wherein said main data comprise video data which are conveyed by said data medium after having been compressed by applying a transform operation upon each of fixed-size blocks of pixel values within each frame of a video
25 signal, wherein said decompressing means includes means

(15c) for applying an inverse transform operation, and wherein said means for selectively restricting reproduction of the original signal serves to selectively eliminate specific ones of a plurality of transform
5 coefficients utilized in executing said inverse transform operation.

6. A reproduction apparatus according to claim 3, wherein said main data are conveyed by said data medium
10 after having been compressed, quantized and encoded, wherein said reproduction apparatus includes means (15b) for dequantizing said main data, and wherein said means for selectively restricting reproduction of the original signal comprise means for controlling said dequantizing
15 means in accordance with said final protection level.

7. A reproduction apparatus according to claim 3, wherein said means for selectively restricting reproduction of the original signal comprise means (52,
20 62) for periodically omitting selected portions of said main data from use by said reproduction control means in reproducing said original signal.

8. A reproduction apparatus according to claim 7,
25 wherein each of said selected portions comprises at least

one digital data sample.

9. A reproduction apparatus according to claim 7,
wherein said main data express a digital video signal,
5 and wherein each of said selected portions comprises at
least one video signal frame.

10. A reproduction apparatus according to claim 3,
wherein said means for selectively restricting
10 reproduction of the original signal comprises gradation
control means (51, 63) for selectively varying a number
of signal amplitude gradations which can be expressed by
each data sample of said main data.

15 11. A reproduction apparatus according to claim 3,
wherein said means for selectively restricting
reproduction of the original signal comprises
controllable digital low-pass filter means (61) for
filtering said main data, to thereby controllably vary a
20 bandwidth of a reproduced original signal obtained from
said apparatus.

12. A reproduction apparatus according to claim 3,
wherein said medium protection data specify a medium
25 protection level and protection position information, and

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25 modifying said final protection level in accordance with

a setting position of said switch and thereby producing an output signal expressing a modified final protection level.

- 5 16. A reproduction apparatus according to claim 15, wherein said final protection level has a value which defines one of a plurality of successively increasing degrees of restriction of reproduction of said original signal, extending between a minimum and a maximum degree of restriction, and wherein said severity modification means is responsive to a change in said setting position of the switch for changing only said minimum degree of restriction.
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- 15 17. A data medium for transferring main data representing an original signal to a reproduction apparatus, to reproduce said original signal by said reproduction apparatus, wherein said data medium further transfers medium protection data which are specific to said data medium and wherein said reproduction apparatus generates apparatus protection data which are specific to said reproduction apparatus, said medium protection data and apparatus protection data in combination specifying a degree of restriction on said reproduction of the
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- 25 original signal by said reproduction apparatus.

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